

ExxonMobil Environmental Services Company
2800 Decker Drive
Baytown, Texas 77520

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Via Email and U.S. Mail



Ms. Lori Cora
Portland Harbor Superfund Site
USEPA REGION 10
1200 Sixth Avenue Mail Code: ORC-113
Seattle WA 98101

Mr. Sean Sheldrake
Remedial Project Manager
Portland Harbor Superfund Site
USEPA REGION 10
1200 Sixth Avenue Mail Code: ECL-122
Seattle WA 98101

Re: Submission of Reports to EPA re Site Investigations

Dear Ms. Cora and Mr. Sheldrake:

In March 2016 Exxon Mobil Corporation submitted to the EPA results and analyses of two sediment sampling investigations concluded in 2014/2015.^{1,2} These results were also submitted to the Oregon Department of Environmental Quality (ODEQ) as well as other interested potentially responsible parties (PRPs). At that time, Exxon Mobil requested a meeting to discuss the implication of these findings for the remediation of Portland Harbor. ExxonMobil is resubmitting these reports based on your request of June 14, 2017, including a Microsoft Access database of the data from the 2014 and 2015 investigations.

Today, Exxon Mobil is also submitting additional analyses conducted by NewFields³⁻⁹ with regard to PAH origin and potential ongoing releases to the Willamette River. Exxon Mobil again requests a meeting with the EPA to discuss these results.

To summarize the conclusions of the nine (9) reports submitted to date:

1. The vast majority of PAH contamination at RM 6.5-5.0 (on both sides of the river) consists of pyrogenic MGP waste originating from the Northwest Natural Gasco site at RM 6.5W¹⁻⁴
Note: Sampling below RM5 may indicate that GASCO impacts continue further down the river.
2. There appear to be significant, ongoing storm water sources of the chemicals that drive risk (including (PAH) at the Portland Harbor Superfund Site.⁵⁻⁸ Exxon Mobil has examined available data, methodologies, and costs for further examination of this issue at four specific areas of concern (including the Gasco site). The Gasco site-related outfalls, according to currently available data, have the highest concentrations of PAH of any outfall studied in the Willamette study area. Exxon Mobil would suggest that addressing these areas is critical to the success of any sediment remedy applied to Portland Harbor.

3. ExxonMobil has reviewed publicly available reports prepared by Northwest Natural regarding its historic land-side source areas as well as remedial measures reported to date (both land-side and in water).⁹ From these data, it appears that land-side remedial efforts have not been sufficient to prevent ongoing releases to the Willamette. This is evident from land-side impacts (stratigraphic location/permeabilities and DNAPL thickness) as well as impacts in the Willamette River sediments and recontamination of the 2005 sediment cap.^{1,2,9} Thus, it appears that actions taken to date have *not* been sufficient to prevent releases to the river. Finally, the interceptor trench proposed by Anchor QEA to be built near the GASCO shoreline would not be deep enough to stop ongoing releases due to land-side sources (DNAPL and shoreline erosion). ExxonMobil has also suggested additional studies that EPA/ODEQ might consider at the GASCO site to improve control.
4. Remediation from RM 6.5 – RM 5.0 (and potentially down to RM 1.9) should only occur after source control is achieved at the Northwest Natural Gasco site to prevent recontamination similar to that documented as occurring at the 2005 Gasco Cap.

In conclusion, ExxonMobil believes that source control at several locations (including Gasco) must be verified prior to sediment remediation to avoid recontamination.⁶ In addition, the NW Natural EE/CA (and remedial design) must include additional delineation work both upgradient (RM 6.5 – 7.0 to cover Siltronic area) and downgradient (RM 6.5 to at least RM 4.0).

ExxonMobil looks forward to discussing these results as well as the previously submitted sediment studies with EPA at its earliest convenience. Resolving the potential ongoing source issue at Northwest Natural and potentially other locations is critical to achieving remedial goals in the Willamette River.

Yours truly,



Deborah A. Edwards, Ph.D.
Global Sediment Technical Lead
ExxonMobil Environmental Services Company

cc: [all with enclosures delivered electronically via DocShare]
Kevin Parrett, Oregon Department of Environmental Quality
Julie Weis, Haglund Kelley LLP
Stephen Goodman, counsel for BP/ARCO
Michelle Rosenthal, counsel for Brix Maritime Co.
Gary Gengel, counsel for Toyota Motor Sales U.S.A., Inc.
Mark Schneider, counsel for KinderMorgan
Greg Jacoby, counsel for Shore Terminals

References:

Previously provided in March 2016:

1. NewFields June 10, 2015 Uhler A. and Krahfurst K. *The nature and sources of PAH in sediments in the vicinity of the former Exxon Mobil terminal (2014 investigation)* [submitted March 2016]
2. NewFields March 9 2016 Uhler A. and Krahfurst K. *Concentrations and character of PAH in sediments in the proposed remedial alternatives area of the Portland Harbor Superfund site, River Miles 5-6 (2015 investigation)* [submitted March 2016]

The following references are being provided electronically via DocShare (3-10):

3. NewFields Microsoft Access database of data from 2014 and 2015 investigations above.
4. NewFields August 26, 2016 Uhler A. *PAH chemical signatures – Portland Harbor Superfund site, River Miles 5-6 area*
5. NewFields March 10, 2017 Uhler A. *Evaluation of Northwest Natural (GASCO) 2010 Alkylated PAH sediment data - Portland Harbor Superfund site, River Miles 5-6 area*
6. NewFields March 5, 2015 Uhler A. and Chin A. *Portland Harbor storm water – task 2: PAH loading estimates*
7. NewFields August 26, 2016 Nuwer J. *Portland Harbor storm water – areas of interest loading estimates*
8. NewFields October 17, 2016 Nuwer J. *Portland Harbor storm water loading study – conceptual approach*
9. NewFields December 16, 2016 Nuwer J. *Portland Harbor storm water investigation – cost estimate*
10. NewFields May 1, 2017 Johnson J. *Evaluation of MGP waste in association with Willamette River contamination - GASCO former MGP facility*
11. Willamette River TO6 grab sediment sample in CBRA 9D-3 Photo obtained during 2014 investigation

[A copy of Reference 11 follows on next page.]

2014 Willamette River TO6 grab sediment sample in CBRA 9D-3 (item 11 in list of references on page 3)

